

1

2 ABSTRACT

3 The invention relates to novel compositions comprising genetically engineered
4 cells and one or more polymers. In an additional aspect, the present invention relates to a
5 method for repairing tissue, for example, cranioskeletal or maxillary bone defects, comprising
6 transducing the BMP-2 gene into bone marrow stromal cells which are harvested from a subject,
7 combining the genetically engineered cells with at least one polymer, and implanting the
8 combination at the site of the defect. The BMP-2 protein is advantageously produced as long as
9 the transduced gene stays in the cells.

10

1

12807017.2 41801 1727C 42005832